WHAT IS CLAIMED IS

1. An electric plug comprising:

an insulative plug housing having a frame part and a header part which has a mounting board and is formed integrally with the frame part to be protruded from the frame part and inserted into a mating receptacle;

male contacts of flexible leaf springs each having a flexible top part, wherein the male contacts are arrayed in parallel on both surfaces of the mounting board for mounting the male contacts, and a pair of the flexible top parts of the male contacts opposed to each other with the mounting board disposed therebetween are raised towards opposite directions to each other; and

a shutter which covers the male contacts when the header part is removed from the mating receptacle and is housed in the frame part by being pushed by the mating receptacle so as to expose the male contacts when the header part is inserted into the mating receptacle.

2. The electric plug according to claim 1 further comprising an elastic member for pushing out the shutter to cover the male contacts when the header part is removed from the mating receptacle.

3. The electric plug according to claim 1, wherein

the mounting board has a top board,

a distance between the flexible top parts opposed to each other with the mounting board disposed therebetween is slightly larger than a width of the top board to make the male contacts

press female contacts of the mating receptacle.

4. The electric plug according to claim 2, wherein

the mounting board has a top board,

a distance between the flexible top parts opposed to each other with the mounting board disposed therebetween is slightly larger than a width of the top board to make the male contacts press female contacts of the mating receptacle.

5. The electric plug according to any one of claims 1 to 4, wherein

legs of the male contacts opposed to each other with the mating board disposed therebetween extend from the header part towards opposite directions to each other to be fixed on a printed-circuit board.

6. The electric plug according to any one of claims 1 to 4 further comprising:

a shell for covering the frame part; and

pairs of soldering tabs arranged in edges of the shell to be fixed on the printed-circuit board.

7. The electric plug according to any one of claims 1 to 4, wherein

the shell is formed of a metal thin plate, covers the frame part and has protruding pieces to cover a part of the header part.

8. The electric plug according to any one of claims 1 to 4, wherein

the shutter has a first shutter wall and a second shutter wall which are opposed to each other with the male contacts disposed therebetween;

each of the first shutter wall and the second shutter wall has a pair of restricting frames on both flanks thereof;

each of the restricting frames has a groove,

each of the surfaces of the mounting board for mounting the male contacts is provided with a pair of rails on opposite edges of the surface, and

the rail is engaged with the groove in such a manner where the shutter can move back and forth.

9. An electric plug according to any one of claims 1 to 4 being installed in a cradle via the printed-circuit board.

10. An electric plug according to any one of claims 1 to 4 being installed in a cable via the printed-circuit board.

11. A receptacle capable of being connected with the electric plug according to any one of claims 1 to 4.